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ANGOLA

BRIEFS

CHOLERA REPORT UNTRUE--Angola has denied that there is a cholera epidemic and that EEC vaccine supplies are being flown in. A Foreign Ministry spokesman, denying a Portuguese news agency report, said the EEC vaccine was in response to part of Angola's preventive medicine campaign "in the context of the return of many refugees from outside the country." [Text] [London WEST AFRICA in English 18 Sep 78 p 1861]

CSO: 5400

AUSTRALIA

EXPERTS STILL HOPING FOR TYPHOID LEAD

Perth THE WEST AUSTRALIAN in English 18 Sep 78 p 10

[Text]

A Public Health Department research team is still hoping to identify a typhoid carrier.

Dr Richard Lugg, of the department, said that two health surveyors and three or four laboratory workers had started tracking down the carrier two weeks ago when it was notified that a 12-year-old Fremantle girl had typhoid.

The team had eliminated as carriers the girl's family and most people in personal contact with her.

The problem was that the disease had been transmitted about three weeks before it made itself manifest.

It was unlikely that the contact had been made through a food source, because this would have resulted in a greater spread of the disease.

The department had not yet eliminated every contact with the girl, but there was no need for the public to worry, Dr Lugg said.

The carrier was likely to be a foreign-born adult female.

This was the case statistically, but he had not ruled out the possibility of the carrier being male.

The 12-year-old girl is isolated at Fremantle Hospital, but is understood to be comfortable.

AUSTRALIA

BRIEFS

ENCEPHALITIS FEAR--Officers from the Public Health Department in Perth will attend an urgent meeting in Melbourne to discuss measures to fight a threatened epidemic of encephalitis in Victoria. The meeting will be attended by federal and state health officials. The Federal and Victoria Health Departments fear the epidemic because of mosquito infestation along the Murray River. An outbreak of the disease in the far north of WA has also led officials to believe a similar outbreak or worse, could occur in Victoria. The WA Commissioner of Public Health, Dr J. C. McNulty, yesterday confirmed that departmental officers would attend the meeting. He said there had been no increase in the eight cases of encephalitis first reported from the north of WA. [Text] [Perth THE WEST AUSTRALIAN in English 7 Sep 78 p 8]

CSO: 5400

BRAZIL

MDB DEPUTY BLAMES GOVERNMENT FOR HIGH INFANT MORTALITY

Rio de Janeiro JORNAL DO BRASIL in Portuguese 30 Aug 78 p 8

[Text] Recife--Commenting on the results of a study carried out by SUDENE [Superintendency for Development of the Northeast]--"Diagnosis of Health in the Northeast"--revealing the region's high rates of infant mortality, the MDB [Brazilian Democratic Movement] senatorial candidate, Deputy Jarbas Vasconcelos, asserted yesterday that the study "exposes once again the despotic regime that afflicts the nation and that has been governing against the people."

He termed "appalling" the figures published by SUDENE, according to which infectious and contagious diseases that can be avoided by basic sanitation and other preventive measures are responsible for 20 percent of the deaths recorded in the region. The rate of infant mortality in the capital of Pernambuco is 119.5 per 1,000 live births, the candidate said.

Worry

"These data leave much to be desired. The agency itself acknowledges that from 1970 to 1975, while the national GDP [gross domestic product] grew 51.2 percent and inflation reached the alarming rate of 225.4 percent, mortality from infectious and contagious diseases increased 36.7 percent and those due to nutritional deficiencies 47 percent.

"The figures," he continued, "furnished by an official agency, merely prove that the system has been governing against the people. The GDP, which indicates the result of work by all Brazilians, increased 51.2 percent. Very well: who kept the fruits of this growth in the national economy? At the same time the GDP was increasing, the Brazilian people were constantly getting sicker."

In the view of Mr Jarbas Vasconcelos, the study, according to which more than 50 percent of workers of the northeast have an income of only half the minimum wage, "shows the reality that everyone already knows, that we of the opposition have always denounced, and that the majority of the Brazilian population feels in its very flesh."

"All this is merely a direct reflection of the despotism, of the people's lack of freedom to choose their own leaders and, consequently, to be able to influence the making of political and economic decisions."

The deputy also said that "the SUDENE study clearly established the causes of the persistence of infant mortality levels: low income of the population and lack of basic sanitation. It formally admits the failure of the government's palliative measures in the field of health, acknowledging that programs such as that for distributing medicine and food did not bring about a reduction in the level of either disease or infant mortality."

"All this," he concluded, "is revolting. It is merely complete and concrete proof of the duplicity, the crimes of a regime that has no commitment to the people, that does not permit them to choose their own destiny, and that represses the demands of the workers for better wages and other living conditions. Only with the end of despotism, of repression, of AI-5 [Institutional Act No 5], with free elections and freedom to organize, will this picture be changed."

8834

CSO: 5400

BRAZIL

SMALLPOX REPORTED AMONG INDIANS IS REALLY CHICKEN POX

Medical Tests Made Secretly

Sao Paulo O ESTADO DE SAO PAULO in Portuguese 19 Aug 78 p 14

[Text] Nearly all the members of two Pataxos Indian families who left their tribe in the village of Barra Velha, in Porto Seguro, Bahia, to live together on the island of Coroa Vermelha, near the city of Santa Cruz Cabralia, are suspected of having infectious smallpox, a disease believed to have been eradicated in Brazil. Physicians from the state Health Foundation collected material for analysis among the sick Indians, taking it secretly to Salvador for laboratory tests.

This information was given yesterday by Marcos Robson, one of the Porto Seguro physicians who were present in the Indian settlement.

Tests Indicate Chicken Pox

Rio de Janeiro O GLOBO in Portuguese 26 Aug 78 p 8

[Text] Salvador--The Bahia Health Secretariat announced yesterday that epidemiologist Ari Sa Menezes, sent to Porto Seguro to investigate the report that there was an outbreak of smallpox among the Pataxos Indians of Coroa Vermelha, returned to Salvador the day before yesterday and is to submit a report Monday. But he already reported yesterday that the five suspected cases are not smallpox, but chicken pox, a quite common illness, mainly among children. However, the death of one of the stricken Indians was confirmed.

8834

CSO: 5400

BRAZIL

SOCIOECONOMIC RAMIFICATIONS OF SCHISTOSOMIASIS DISCUSSED

Rio de Janeiro JORNAL DO BRASIL in Portuguese 5 Aug 78 p 18

[Text] Brazil certainly has the most serious schistosomiasis problem in the Western Hemisphere, according to the World Health Organization. In addition to the social affliction caused by the disease, how much must the nation be losing in productivity and medical and therapeutic costs from the disease? Calculating the existence of 12 million persons infected with the disease, at an amount of \$20 each, the loss would reach \$240 million, or 4.2 billion cruzeiros, annually.

Schistosomiasis has considerable socioeconomic influence in its endemic area: chronic debilitating illness causes a reduction of income and production from human work. Among clinical forms of the disease that are considered serious, Symmers fibrosis is prominent; this is always accompanied by portal hypertension, pulmonary hypertension, the cyanotic syndrome and tumor formation. This could cause difficult situations such as intestinal hemorrhages and, consequently, acute anemia, hypoproteinemia, ascites, liver deficiency; hypersplenism; infantilism, "lung color," monale, followed by cardiac deficiency, cyanosis, intestinal stenosis; glomerulonephritis and neurological symptoms. Many patients in an advanced stage must undergo surgery for removal of the spleen (splenectomy) and ligatures or resections of tumors.

Another aspect of schistosomiasis that has recently begun to be demonstrated is its role as a modifier of other diseases. Pioneering studies by several scientists indicate that the disease can change the development of typhoid fever, jaundice, tuberculosis and viral hepatitis.

Official statistics have little to say about mortality from schistosomiasis. According to the Brazilian Pharmaceutical Industry Association--ABIFARMA--this disease was not mentioned as a cause of death in the Western Hemisphere during the 1953-57 period. In other countries of the world where it was reported, the rate was 0.44 per 100,000 inhabitants. However, the majority of those who have it live in remote areas, and only a small number can get

to the urban centers when their illness is found to be in a critical stage. In the locality of Agua Preta, Pernambuco, two scientists, Barbosa and Voss, discovered that the annual rate of mortality from schistosomiasis was 44.8 per 100,000 infected persons.

The social ramifications of the disease are increased by the fact that the new serious forms attack mainly poor people of rural areas who must make a great effort to provide their subsistence and frequently that of their dependents. Physicians who live in the endemic areas or even in cities such as Salvador, Recife or Belo Horizonte come into daily contact with the tragedies of hepatosplenetics, with their hemorrhages of uncertain prognosis, their incapacity for work and the competition for hospital beds.

From the economic point of view there are many uncertainties about the consequences of schistosomiasis. The interrelationships between health and disease and economic development are not yet totally understood. Only in recent years have quantitative data been obtained about the economic importance of some diseases. However, taking into account that there are millions of persons with the disease in Brazil, tens of thousands of whom are bearers of serious forms of the disease, the nation's expenditures for medication and hospitalization can well be imagined, even though this applies to only a portion of these patients. Perhaps an even more significant calculation about the cost of the disease is the loss of earnings it causes. As many victims are partially or totally incapacitated, there is an enormous loss of resources, mainly because the age group affected is the most productive--individuals 15 to 40 years old. This will be more significant in the future, when it is hoped that few people will live in conditions of underemployment. Computations made by Louis Olivier indicated that in 1965 Brazil lost about 400 million cruzeiros in resources (computed without monetary correction) and that the disease represented a total loss to the nation of about 800 million cruzeiros (also without monetary correction).

8834

CSO: 5400

BRAZIL

BRIEFS

RIO COMBATS TUBERCULOSIS--The Medical Care Secretariat of Rio de Janeiro state is taking preventive measures to combat tuberculosis, which, according to data from the Ministry of Welfare and Social Assistance, was responsible for hospitalization of 10,000 patients during the past year and medical treatment for 6,200 additional adult patients in Rio de Janeiro municipality alone. Among the measures to be taken, an increase in resources--material, personal, administrative and technical--is planned for the specialized units of the municipality. According to the communique distributed by the ministry, "The low cultural, social and economic level of a large part of the population, combined with the absence of a technically and administratively well-structured public health system, are suggested as probable causes for the extent of the occurrences." [Text] [Sao Paulo FOLHA DE SAO PAULO in Portuguese 19 Aug 78 p 13] 8834

RONDONIA YELLOW-FEVER ALERT--Porto Velho--The SUCAM [Superintendency for Public Health Campaigns] directorate in Rondonia will send to the Oswaldo Cruz Institute in Rio de Janeiro samples of the liver of every person who died of suspected yellow fever, as a precaution due to the outbreak occurring in neighboring countries. Vaccination against wild yellow fever is extensive throughout the territory, which is now in a state of alert by determination of the Ministry of Health. [Text] [Rio de Janeiro JORNAL DO BRASIL in Portuguese 24 Aug 78 p 16] 8834

CSO: 5400

CAMPAIGN LAUNCHED TO ELIMINATE TUBERCULOSIS

Kuala Belait BORNEO BULLETIN in English 5 Aug 78 p 2

[Text]

BANDAR SERI BEGAWAN.— A campaign to X-ray adults and immunise children against tuberculosis is about to start, with the aim of eliminating the disease from the state within about 12 years.

"There are certainly a lot of cases here, but there is also a certain amount of natural resistance," said Pehin Dato Dr P I Franks, the Di-

rector of Medical Services.

He said that cases that might prove fatal to Europeans are not so serious in local people.

Pehin Dato Dr Franks added that the immunisation is already being done at health clinics throughout the state, and through the Flying Doctor service.

This week Dr Arthur Sinnatamby, specialist physician at the Chest Clinic here, emphasised that these days a 95 per cent cure rate can be achieved with modern drugs.

The trend is to treat patients at home "and the cure is almost guaranteed if the disease is caught early and the patient takes his medicine regularly."

He added that TB can now be cleared up in a year or less, whereas the treatment used to take about two years.

"Obviously a few people don't respond to treatment as well as others for different reasons. They might be allergic to the drugs, for example.

"So each patient is assessed individually. Some people can continue to do light work while they are being treated, while others might need more rest."

Dr Sinnatamby, who has been here about four months, said patients were first given drugs every day for the first two weeks, and then drugs were taken twice each week.

"One problem we have is that sometimes people don't take their drugs regularly, because they might feel better or they forget. So now we try to supervise their medication personally."

The highest number of cases recorded in recent years was 293 in 1968. Last year there were 153 throughout Brunei, in 1976 134, and in 1975 there were 172.

A survey carried out in Temburong in 1973 showed that nearly two people in every 100 had the disease — and this only covered 14-year-olds and over.

Now screening in the Tutong District will start in October.

"We have chosen Tutong for the simple reason that Temburong has been covered, and there are active clinics in both Belait and Brunei-Muara," said Dr Sinnatamby.

Registration of the population of about 19,000 people in Tutong will start next month, and later the Medical Department will provide transport to and from the hospital for X-raying.

Sri Lanka-born Dr Sinnatamby said about 100 people will be screened each day.

MEASLES EPIDEMIC BELIEVED TO BE ABATING

Kuala Belait BORNEO BULLETIN in English 5 Aug 78 p 19

[Text]

BANDAR SERI BEGAWAN. —An epidemic of measles has caused some deaths throughout the state and worried health officials here.

In some cases pneumonia has set in, sometimes with fatal results.

"But the very severity of the attacks has been alarming," said one Health Department official.

However, the epidemic is believed to have reached its peak in June and health officials believe the disease is now abating.

No figures are yet available for June, but there were 226 cases reported throughout Brunei in May.

This compares with 201 cases in April, 113 in March, 45 in February and 18 in January.

The Health Department is now planning to carry out an immunisation campaign against the disease throughout the state.

"We hope to prevent the same thing happening again next year," an official.

CSO: 5400

BURMA

BRIEFS

CAMPAIGN AGAINST DISEASES--A campaign against malaria, dengue fever, filariasis, Japanese encephalitis and plague will be launched in Burma with financial aid from the International Development Agency of Canada, WHO and UNICEF. The Burmese Government will spend the equivalent of \$5.9 million while the International Development Agency of Canada will contribute \$5.65 million, WHO \$1.4 million and UNICEF \$1.9 million. The money will be used to purchase medicines, insecticides, sprayers and laboratory equipment. [Rangoon Domestic Service in Burmese 1330 GMT 12 Sep 78 BK]

CSO: 5400

CAMEROON

BRIEFS

VACCINATION CAMPAIGN--A team of six nurses from the Preventive and Rural Medicine Department of the Public Health Ministry has since 13 March 1978 undertaken a vast campaign of medical surveys and vaccination against measles, chicken-pox, and BCG for more than 30,687 children under six. No new cases of leprosy were indicated during the survey campaign which is to end 30 June. It was pointed out that in Eseka Town more than 1,892 children were vaccinated during a vaccination session especially organized at the women's and children's clinic by the head of the Public Health Ministry's department for Nyong and Kelle and the chief of medicine of the Eseka hospital. [Excerpts] [Yaounde CAMEROON TRIBUNE in French 7 Jun 78 p 8]

CSO: 5400

EAST GERMANY

BRIEFS

MEDICAL CARE SHORTAGES--Although Anneliese Toedtmann, deputy minister for health in the GDR, has announced improvements in connection with inpatient medical care of GDR citizens, especially involving personnel and equipment in hospital surgical facilities, there is still a shortage of hospital physicians, nurses, and accommodations, as well as a lack of modern medical technology. As a result, there are prolonged waiting periods for surgical treatment. Mrs. Toedtmann also stated that modernization of the old hospitals, which no longer conform to present-day requirements, and construction of new modern inpatient installations are to be expedited. According to official data, the number of hospitals in the GDR decreased from 679 in 1967 to 563 in 1977; the number of hospital beds decreased from 200,000 in 1967 to 178,500 in 1977. In 1977 there were 107 beds per 10,000 citizens, as compared with 116 beds per 10,000 citizens in 1967. [Text] [Bonn IWE-TAGESDIENST in German No 186, 25 Sep 78 pp 2-3]

CSO: 5400

INDIA

BRIEFS

ENCEPHALITIS CLAIMS 108 LIVES--Gauhati, 17 Sep--Encephalitis has claimed 108 lives in Lakhimpur and Dibrugarh districts of Assam, says UNI. According to official reports, 201 people have been admitted to the Assam Medical College Hospital at Dibrugarh. Another report said four people died at Behora tea estate in Golaghat subdivision of Sibsagar district. [Text] [Calcutta THE STATESMAN in English 18 Sep 78 p 12]

CSO: 5400

KENYA

BRIEFS

PLAGUE OUTBREAK--The Ministry of Health in Nairobi yesterday announced that plague had broken out at Lengesim, Kajiado. A treatment centre had been set up. In appealing to people in the district to restrict movement, the Ministry said there was no need for people to travel to Namanga or Loitokitok for treatment. Effective treatment could be had at the Lengesim centre. People have been advised to be on the lookout, and when they find dead rats around their homes or manyattas to report the matter to their headmen, chiefs or the medical teams currently working in the district for appropriate action. The Ministry said there was no cause for alarm and people should not panic over roadblocks set up to restrict movement. [Text] [Nairobi DAILY NATION in English 16 Sep 78 p 24]

POSSIBLE MENINGITIS, CHOLERA OUTBREAK--A man died yesterday at Busia District Hospital after arriving from a village where three other people died four days ago from a mysterious disease suspected to be either meningitis or cholera. Hospital authorities were hesitant to confirm the cause of death. A source close to hospital authorities said the cause could be meningitis. Already seven people with the same symptoms have died in the area. The latest victim was 25-year-old Oduori Mukhwana. He died yesterday at 1 p.m. following a short illness. He had complained of a stiff neck, pain in his spine, vomiting and diarrhoea. Yesterday, six more people from the same village were admitted to the same hospital. They were Mr Makokha Were, Miss Nabwire Makyo, Mrs Auma Opondo, Mr Oputu Wandera, Mrs Paseanire Odonia and Miss Florence Namwagisa. Hospital authorities have admitted that some people have died from meningitis at the hospital. A hospital spokesman said those who died came from Sofia Estate, Matayo Village and Bunanda Village. A NATION survey in Bunanda and Nang'oma villages revealed some of the deaths occurred there but there were no records at the hospital. Yesterday a medical team from Busia District Hospital was sent to Matayo Sub-location to investigate the cause of the deaths. [Text] [Nairobi DAILY NATION in English 16 Sep 78 p 24]

OUTBREAK OF 'MYSTERIOUS' DISEASE--Coast Provincial Medical Officer Dr A.R. Fernandes has confirmed that a mysterious disease hit the Shimo la Tewa main prison near Mombasa recently, claiming the life of an inmate. [Text] [Nairobi DAILY NATION in English 16 Sep 78 p 24]

PLAGUE OUTBREAK UNDER CONTROL--Kajiado DC--Mr Peter Waithaka has urged people who live around Lengism in Loitokitok, Amboseli and Namanga to stay calm as the situation is under control following an outbreak of plague in Lengism. Mr Waithaka said health officials were in the area and anybody suspected of suffering from the disease should be reported immediately. District health officer Mr Mburu said the situation was under control and there was no need for panic. [Text] [Nairobi DAILY NATION in English 19 Sep 78 p 3]

CSO: 5400

LAOS

BRIEFS

ANTIMALARIA WORKERS TRAINED--Vientiane, September 7 [KPL]--The Department of Hygiene and Disease-Prevention of the Ministry of Public Health recently concluded a one-month course for training 21 health workers in fighting malaria. This is the third course of this kind organized by the department so far this year. Dozens of anti-malaria workers had been trained in two previous courses for different localities. Vientiane, Luang Prabang and Savannakhet provinces have investigated the incidence of malaria and taken necessary measures against this disease. As a result, tens of thousands of people in these provinces have been examined and vaccinated. Those who suffered malaria have treated adequately. [sentence as received] [Text] Hanoi KPL in English 0907 GMT 7 Sep 78 BK]

CSO: 5400

TREMENDOUS DECLINE IN MALARIA CASES

Kuala Lumpur NEW SUNDAY TIMES in English 6 Aug 78 p 7

[Text]

KUALA LUMPUR, Sat.— Malaria in Malaysia has declined tremendously over the past 10 years, — from 300,000 cases in 1967 to 18,649 cases last year — although a United Nations report states that the disease is on the rise almost everywhere else in the world.

The target date for malaria eradication in Malaysia is 1982.

"So far, about \$85 million has been spent on the programme since it started in 1967, and about \$20 million more will be spent this year," Director of the Malaria Eradication Programme Dr. Ezaddin Mohamed said in an interview with the New Sunday Times.

"The downward trend

is mainly due to the success in the implementation of the programme, especially in the rural areas," Dr. Ezaddin said.

"In places like Ulu Kelantan and Ulu Pahang where accessibility is quite restricted, our health teams even have to use boats in order to reach the people in the kampungs."

The urban areas, he said, were free from indigenous malaria, and they had benefited greatly from the Malaria Control Programmes that had been implemented under the British rule, some years back.

"At the moment, there are 175 district health sectors for malaria eradication in the country, with each sector catering to a popu-

lation of about 50,000 people.

"A staff of over 5,000 are involved in area surveys, 6-monthly spraying programmes, taking blood-tests and teaching health education, mainly in security areas, development schemes and Orang Asli settlements," Dr. Ezaddin said.

He said the main objective of the programme was not the elimination of mosquitoes but the breaking of the transmission cycle of the malaria parasite.

He added that travellers, especially those coming to Malaysia from countries that had reported increases in Malaria cases, had to be careful and to protect themselves by taking anti-malaria drugs prescribed by their doctors.

CSO: 5400

MALAYSIA

BRIEFS

CHOLERA CASES IN KELANTAN--One more person has died of cholera in Kelantan, bringing the number of such deaths in the state so far to 14. The latest victim was a 27-year-old woman who died at home in Kampung Pulau Pekan Dolak, Pangkalan Ceper, on 4 September. Another 12 persons were confirmed to be suffering from cholera, bringing the total number of such cases to 321. The latest victims were from Ulu Kelantan, Kota Bahru, Bacuk and Tumpat. Of the 321 cases, 13 are still at the general hospital in Kota Bahru. [Kuala Lumpur Domestic Service in English 1130 GMT 4 Sep 78 BK]

CHOLERA IN PENANG--The parliamentary secretary to the Ministry of Health has said that the cholera situation in Penang is now under control. He said that measures are being taken to prevent the disease from spreading. He said this to reporters after being briefed on the cholera situation by the State Director of Medical and Health Services. There were 116 confirmed cases with 2 deaths and 42 carries. [Kuala Lumpur Domestic Service in English 0000 GMT 14 Sep 78 BK]

CHOLERA IN KELANTAN--In Kelantan, 6 more persons were confirmed to be suffering from cholera, bringing the total to 340. The new cases were five women and one man. The death toll in the state has risen to 16. In Kota Bahru, the disease claimed another victim, a 77-year old woman from Kampung Pantai Sering. According to an information department statement, the well at the woman's home was reported to contain cholera germs. [Kuala Lumpur Domestic Service in English 0000 GMT 14 Sep 78 BK]--Another case of cholera has been detected in Kelantan. This brings the total number of cases in the state so far to 344. The state information department statement said the latest victim was from Kampong Jeladan Awang in the Ulu Kelantan district. The death toll stood at 18. The statement said seven suspected cases of cholera had also been reported bringing the total number of such cases to 22. [Kuala Lumpur Domestic Service in English 1130 GMT 25 Sep 78 BK]

NAMIBIA

MORE MENINGITIS CASES NOTED; ONE DEAD

Windhoek THE WINDHOEK ADVERTISER in English 18 Sep 78 p 1

[Article by Dale Perrott-Humphrey]

[Text] The toll of the dreaded disease meningitis which has broken out in SWA since July 17 has now reached 25 if Windhoek State Hospital cases are anything to go by. One person has died.

According to a spokesman for the Administration's Department of Health less than half these cases originated from the old Owambo Hostel.

"Sporadic cases of the meningococcal strain are common throughout the year but in SWA it reaches a peak period during August...from the end of July to the beginning of September," said Mr P. C. Botes of the Municipal Department of Health.

Although meningitis is a dangerous epidemic condition Mr Botes said no further cases had been reported in the old hostel and he was confident the outbreak had been brought under control.

The disease usually affects a closed community such as a school or hostel and has an average incubation period of three to four days.

Given certain conditions such as bad ventilation and insufficient space between beds the disease can reach epidemic proportions.

Although the fatality rate is less than five percent with modern methods of treatment the illness can lead to blindness, deafness and marked mental deterioration due to the characteristic inflammation which affects the membranes of the brain and/or spine.

The disease is more common among the Black community.

"Traditional huts have adequate cross ventilation, but once a Black moves into a house he seems particularly averse to opening windows and doors.

"But that doesn't mean Whites are exempt from meningitis. We have had the occasional case reported here in Windhoek--and again bad ventilation and over-crowding is the primary cause," he said.

NIGERIA

STATISTICS ON PARASITE INCIDENCE REVEALED

Lagos DAILY TIMES in English 20 Sep 78 p 21

[Interview with Ikedinachukwu Okpala, professor, University of Nigeria, by Igbokwe Nweruh]

[Text] A few weeks ago, a Nigerian parasitologist, Professor Ikedinachukwu Okpala, of the University of Nigeria, Nsukka, alerted the nation on the threat and ravages of parasites to the world's and Nigerian economy.

Before he left Nigeria, recently, to attend a two weeks congress of the World Federation of Parasitologists in Warsaw, Poland, Professor Okpala granted an exclusive interview on the threat of parasites to the nation's economy and how to combat parasites to the DAILY TIMES reporter at Nsukka, Igbokwe Nweruh.

DAILY TIMES: Professor Okpala, in your recent address to the annual conference of your Society (NSP) you announced the threat posed by parasites to the world in general, including Nigeria. Could you narrow this threat to Nigeria and her economy, treating the matter in a greater detail?

PROFESSOR OKPALA: Yes. I shall start by stating that Nigeria like most developing countries, is the paradise of parasites. The reason is that the country is saddled with the problems of illiteracy, poverty, disease and low standard of living.

As a result the country is badly infected with immense human, animal and crop parasites. In fact, our greatest problem in human diseases is endemic rather than organic.

And the situation is made more complex by the shortage of trained and knowledgeable personnel needed to tackle the problems and the apparent insensitivity of both government institutions and other establishments to the enormity of the problems.

QUESTION: Can you name some of these parasites diseases ravaging our people and economy?

ANSWER: Some of the prevalent parasitic diseases in this country are malaria, sleeping sickness, river blindness, bilharziasis, dysentery and paragonimiasis. Other are hookworm, roundworm, and guinea worm. Most of these are mainly human diseases, though their different species also infect animals.

Crops and plants have their own parasitic diseases, especially worms (nematodes). However, malaria seems to be the most disastrous of them all, and it is perennial.

QUESTION: What are the incidence rates of parasitic infections in the country?

ANSWER: Nigerian parasitologists, in spite of financial and technical handicaps, have been able to make individual investigations on some parasitic diseases in the country. They have, to far, concentrated mainly on trying to find out how many Nigerians suffer from any particular parasitic disease.

This is what I call "base-lying research." The research includes those of animals and plants, which involves discovering where the diseases occur and to what extent they are prevalent.

Nigerian parasitologists have indeed been concerned with how they can make this country a hell for parasites. For that reason, their various researches have been spread to the areas of epidemiology, incidence, immunology, virology, helminthology, protozoology, disease vectors (such as houseflies, tse-tse-flies, mosquitoes, crabs, snails, cyclops and reduviid bugs) and microbiology.

As of today, the most prevalent parasitic diseases in the country are malaria, bloodflukes, hookworm and sleeping sickness. Available reports from some parts of the country have shown prevalence rates from roundworm as ranging from 7.9 percent in the Northern States; 12.4 percent in Lagos school children; 7.15 percent in Lagos civil servants; 70 percent in the Western states; to 38.8 percent in Obukpa, a town near Nsukka and 45.85 percent in Atani, both in Anambra state. These figures were obtained in the years 1961 (for North, West and Lagos); 1976 (for Atani) and 1977 (for Obukpa).

For hookworm, the figures are 58.3 percent for Lagos civil servants in 1961; 14.9 percent for Lagos school children in 1961; and 63.8 percent for Nsukka school children in 1977.

A record in the pathology department of the Lagos General hospital shows that of 4,759 patients examined during the 1950-55 period, 73.4 percent had roundworm; 38.9 percent had whipworm, and 8.1 percent had dysentery.

In 1961, 515 civil servants were examined in Lagos for intestinal parasites. The results showed 71.5 percent roundworm; 66.6 percent whipworm; 53.3 percent hookworm; 2.1 percent tapeworm; 77 percent pinworm; 38 percent blood flukes, and figures ranging from 7.2 to 10.9 percent for various types of dysentery.

In 1977, at Obukpa, near Nsukka, a survey carried out showed 38.8 percent for roundworm; 34 percent for hookworm; 3.08 percent for diarrhoea and 12.9 percent for dysentery.

There is only one recorded figure for bilharziasis. That is over 80 percent infection among primary school children in Epe, Lagos state, according to a 1971 survey.

Coming to malaria, Cowper's survey showed 6 percent infection for Moor Plantation in Ibadan while Bruce-Chwatt (1952) recorded 27.4 percent for Lagos pregnant women and their new-born babies. And from recorded 3,540 autopsies performed on children in Lagos during the years 1933-50, Bruce-Chwatt concluded that malaria was responsible for the death of 9 percent in children aged five to seven years; 4 percent in older children and 2 percent in adolescents.

He estimated that about 35,000 children under the age of 15 years died of malaria in Nigeria every year.

Bruce-Chwatt stated the malaria mortality for 1,000 Africans exposed to the risk as 12.5 percent for infants; 7 percent for young children; 1 percent older children and 0.3 percent for adolescent and adults.

In his own survey in 1971, Okpala (my humble self) recorded 61.5 percent infection rate among 1,406 school children in Epe. Those children were aged between four and fourteen years. Also in 1971, Okpala carried out surveys on 232 and 260 primary school children from Atani and Obukpa respectively.

These showed results of 58.6 percent and 25 percent infection respectively. And of the 529 undergraduates and kitchen personnel on the Nsukka campus of the University of Nigeria whom Okpala also examined, 0.9 percent had malaria infection while about 2 percent of them had sickle cell.

Malaria is believed to be responsible for 25 percent of the annual infant mortality in most of our urban centres. This figure could be about 50 percent or more for the rural areas of this country.

(To be continued)

CSO: 5400

NIGERIA

MASS IMMUNIZATION AGAINST MENINGITIS IN KADUNA STATE

Kaduna NEW NIGERIAN in English 19 Sep 78 p 1

[Article by Ibrahim Madaki]

[Text]

THE Kaduna State Government is to embark on mass immunisation against the deadly cerebro-spinal meningitis (CSM) in a bid to control the disease effectively.

The exercise will involve 2,284,950 people in the age group of 1-15 years.

To this end, the state government has released 637,000 Naira for the exercise which is expected to begin as soon as the rains are over.

These facts were disclosed yesterday in Kaduna by the state's Commissioner for Internal Affairs and Information, Alhaji Altine Liman Muhammed.

The commissioner said between 1954 and 1977 the epidemic broke out three times in the state and most of those affected were in the 1-15 years age group.

He said immunisation of this group would offer "hard immunity" against the disease.

The exercise, which would cover the 14 local government council areas, would be carried out by the state's Ministry of Health, he said.

The disease claimed hundreds of lives in several areas in the northern states early this year.

CSO: 5400

NIGERIA

BRIEFS

HEPATITIS KILLS SEVEN--Seven persons, among them two pregnant mothers and a lady have been reported killed by infectious hepatitis in Idemili Local Government area of Anambra State. A report reaching Onitsha from Ogidi and Nkpor said more than 60 persons were admitted into various hospitals in the area in connection with the disease. Already, a team of health officers, led by the medical officer for health in charge of Onitsha Zone, Dr B. C. Madu, had left for the area of inoculations against the disease. The team has also appealed to respective families in the area to make themselves available for treatment at Idemili Health Office, Ogidi or any zonal health office outside the area. Over 2,000 people died when the disease broke out in the former East Central State in 1971. [Article by John Ofolebe] [Text] [Ikeja THE PUNCH in English 18 Sep 78 p 24]

CSO: 5400

PEOPLE'S REPUBLIC OF CHINA

ENCEPHALITIS VACCINATION MAY BECOME COMPULSORY

All Visitors May Be Vaccinated

OW250926Y Paris AFP in English 0658 GMT 25 Sep 78 OW

[Text] Peking, 25 Sep (AFP)--China's developing tourist industry may make vaccination compulsory for visitors against a mosquito-borne viral infection, also called Japanese encephalitis, which recently killed an attache at the Italian Embassy in Peking, medical sources here say. The attache Antonio Penisero died here on September 17 after 18 days in Peking capital hospital.

The infection is common in pigs throughout Asia and is contracted more easily in humid regions. In humans the disease is not contagious but Chinese sources reported hundreds of cases occurred each year in the capital alone mainly between May and early October.

Vaccination is not compulsory for entrance to China and vaccination practices for Chinese citizens are not fully known. Chinese sources said most children receive a Chinese developed vaccine at school and sometimes at university. Vaccination of adults follows no set rules. No foreign residents including diplomats and students were known to have been vaccinated by Chinese doctors.

Medical sources here said it was unlikely this disease would spread to other continents but they said the increasing number of tourists in China could lead the authorities to make vaccination compulsory. The same sources said there was a Japanese vaccine giving about 80 to 85 percent protection for one year starting one month after vaccination itself. Anti-encephalitis vaccines otherwise gave only a month's protection, the sources said.

Foreign Students Vaccinated

OW250928Y Hong Kong AFP in English 0833 GMT 25 Sep 78 OW

[Text] Peking, 25 Sep (AFP)--Disturbed by the death of a foreigner from viral encephalitis in Peking, the authorities have distributed a vaccine against the disease among foreign students here. A student said the vaccine, in the form of a brown soluble powder, was handed out at midday today without any explanation by the university authorities. It was the first time this had happened. Chinese students at the Foreign Language Institute are vaccinated every year against encephalitis, but foreign students had previously been left out.

CSO: 5400

SINGAPORE

BRIEFS

CHOLERA CASES--Singapore, 24 Sep (AFP)--The ministry of environment has embarked on a big "cholera manhunt" to trace the source of the disease detected following a Chinese festival dinner here recently. Seven cases of the epidemic were reported after a moon cake festival dinner attended by some 1,000 people on September 14. The seven diners who fell victim of the disease and were admitted to hospital in a serious condition last week are now recovering. An eighth person, although not displaying any symptoms of cholera, has been identified as a carrier. This is the first time a "common source of contamination" has been detected in the history of cholera in Singapore. Because of the high safety-level of local water supply and high standards of sanitation cholera in Singapore is usually "food-borne" and not "water-borne" as in other countries. [Hong Kong AFP in English 0205 GMT 24 Sep 78 BK]

CSO: 5400

TURKEY

BRIEFS

RABIES OUTBREAK--Eleven villages in Bursa Province have been quarantined because of rabies. During the first 8 months of the year alone, 57 persons in this area have been infected by rabies. According to Provincial Veterinary Director Ziya Unal: "Rabies has been reported in a total of 11 villages and 14 neighboring areas, all of which have been put under quarantine. For a period of 6 months the shipment of animals to or from this area will be prohibited." Official health authority figures indicate that during the month of January, seven persons from the central administrative district of Bursa were infected by rabid dogs and cats. The following breakdown was given for the number of persons infected during the succeeding 7 months of the year: 5 in February, 11 in March, 4 in April, 10 in May, 5 in June, 6 in July and 9 in August. Director Unal went on to say: "One person from central Bursa Province has died from rabies. He did not check into the hospital in time. In those cases where the victim is bitten in the cranial area it is much more difficult to save his life. One of the six dogs taken into custody under the suspicion of being rabid during the past 8 months was actually found to have rabies... Nevertheless, those who have been bitten should check into the hospital without delay." [Excerpts] [Istanbul MILLIYET in Turkish 2 Sep 78 pp 1, 14]

CSO: 5400

YEMEN ARAB REPUBLIC

BRIEFS

CHOLERA CASES--San'a', 17 September--An authoritative source said here today that 250 cholera cases have been reported in the country since the first case appeared 2 months ago. The source said that the death rate is very low, although he declined to give the number of deaths. The source said that the YAR health authorities have taken the necessary measures to stop the disease from spreading. [Text] [Baghdad INA in Arabic 1215 GMT 17 Sep 78 JN]

CSO: 5400

INCIDENCE OF ROUNDWORMS IN LUSAKA

Lusaka TIMES OF ZAMBIA in English 21 Sep 78 p 5

[Text]

THE disease of roundworms, which has become prevalent among many children in Lusaka is caused by poor sanitary facilities, a medical expert has said.

University Teaching Hospital senior medical superintendent, Mr Richard Carruthers, appealed on Tuesday to the public to take their children for medical attention quickly and also build proper latrines to minimise the disease.

He was commenting on reports from Matero township that many residents had worms in their stomachs. The residents accused the medical authorities of failing to eradicate the worms.

Mr Carruthers said roundworms were prevalent in areas where there was no proper sanitation, adding that "if people dug proper latrines the worms would not be so common."

"Fortunately we have very effective medicine against the worms and anybody noticing them should go to their clinics," Mr Carruthers said and added that everybody must behave properly and children should be taught how to use latrines.

"When people are careless and excrete anyhow the faeces dry up and the roundworms' eggs are spread by the wind," he added.

Yesterday, a Bank of Zambia employee, Mr Gaston Phiri, told the Times of Zambia that he was stunned to see worms being coughed out by his one-year-old nephew.

Mr Phiri described how he went to visit his sister's family and saw his nephew, Isaac Ngoyi, coughing out a lump of ten or more worms.

Mr Phiri, who claimed to have been frightened at their sight, picked two of the worms and put them in a bottle which was taken to the University Teaching Hospital where they were identified as roundworms.

He said that he had talked to a number of Matero residents who confirmed that the worm scourge was rife in the township especially among children.

Mr Phiri said the general opinion among the township's residents was that the worms were the result of foods like milk, bread and vegetables.

He also told of a child who had to be operated on after worms had entangled themselves into a ball in its stomach and there was no way for them to be driven out.

A number of housewives confirmed that the roundworms were common in Matero.

CSO; 5400

ZAMBIA

RABIES OUTBREAK HAMPERED BY VACCINE SHORTAGE

Lusaka ZAMBIA DAILY MAIL in English 18 Sep 78 p 3

[Text]

EFFORTS to control the spread of rabies are being hampered by the acute shortage of vaccine, acting Director of Veterinary and Tsetse Control Services, Dr. Mainza Shandomo, said in Lusaka over the weekend.

Describing the situation as serious, Dr. Shandomo said the shortage affected the whole country and many outbreaks of rabies have been reported to his office.

He said the most seriously affected areas were the Copperbelt and Lusaka provinces, where the majority of the rabies cases have been reported.

Dr. Shandomo said the disease was spreading fast and did not know when the vaccine will be available.

He however said his department was trying to get vaccine from abroad through the importing agents - Cooper Zambia Limited.

The director said an order for vaccine had already been placed with Cooper Zambia Limited but he feared that the company might have difficulties in ordering the commodity.

A spokesman for Cooper declined to confirm the department's order but said his company had 240,000 doses of rabies vaccine for open sale - Zana

CSO: 5400

ANGOLA

SWINE FEVER CASES REPORTED IN LUANDA

Luanda JORNAL DE ANGOLA in Portuguese 21 Sep 78 p 2

[Text] The Ministry of Agriculture issued yesterday the following communique through the office of the deputy minister, comrade Germano Gomes:

"There have been outbreaks of African swine fever in the municipalities of Luanda, Viana and Cacuaco. Given the fact that the disease, for the last two years, has only attacked hogs being raised by private breeders who do not observe the most elementary hygienic rules, and since it is necessary to adopt adequate preventive measures to ensure that state hog-breeding units not become infected, it is decided that:

- 1--No hogs be imported or exported from the province of Luanda.
- 2--No hogs be shipped through the province of Luanda.
- 3--Any suspicious cases of disease among hogs be immediately reported to the Luanda agricultural provincial delegation.
- 4--Any questions raised by the present communique should be brought for the clarification to the Luanda agricultural provincial delegation."

CSO: 5400

OFFICIAL DISCUSSES FOOT-AND-MOUTH CONTROL MEASURES

Gaborone DAILY PRESS in English 1 Sep 78 p 1

[Text] **The Eastern and Southern African Sub-Regional conference on cooperation against animal diseases control and animal resources attended by delegates from ten countries has been told by the Botswana Principal Veterinary Officer, Dr Martin Mannathoko that Botswana had been free from foot and mouth disease for some 10 years prior to recent outbreak of the disease last October.**

He said as soon as this out-break was confirmed movement of animals and animal products were restricted to a radius of 16 kilometres. He added that movement across cordon fences was stopped and all quarantine stations were closed. To determine control of the disease a thorough inspection of all cloven hoofed livestock in the country was carried out by the veterinary staff, all sheep and goats were driven to the nearest quatinines and cordon fences for quarantining.

The ring vaccination of cattle, sheep and goats were manned with pickets some 10 km apart and patrolled all the time.

Vehicles and all other transport travelling through Veterinary cordon fences were disinfected with washing soda and the department combined control measures with evaluation of the efficiacy of various vaccines used. The Foot and Mouth vaccine type, SAT2 produced by B. Wellcome in U.K. failed completely while Type SAT1 performed much better.

Dr Mannathoko told the conference that as a result of the failure of that drug, Botswana decided therefore to produce its own vaccine in Gaborone. In

co-operation with Ifra Meriux Institute, Lyon in France, the country is building a vaccine laboratory in the Broadhurst extension of Gaborone.

He told them that work had already started on the erection of the project which will be built in two phases. The first phase is emergency one and the second phase will be a permanent laboratory and it is hoped that by January 1979 the first batch of locally produced vaccines will be used.

Dr Mannathoko told the conference that Botswana hopes to sell the foot and mouth vaccines to other African countries. He told the conference at length how we in Botswana control the

disease. The conference which is ending today selected Malawi to be the Regional Centre for the control of ticks and tick-borne diseases.

The suggestion was put before the conference by the Inter-African Bureau for Animal Resources representative Dr Amodu Tall, who told the conference that the decision for setting up of such a centre was arrived at in Algiers, after Directors of Veterinary Services had asked the Inter-African Bureau for Animal Resources to contact FAO for establishing the Tick and Tick-borne entres.

After adopting this recommendation he explained an expert was appointed to visit a number of African countries to search for suitable place for the centre.

Dr Tall revealed to the conference that the west African countries have their similar centres in Nigeria and Senegal. The Agreement for the setting up the centre was made in Lome.

The participating countries presented their reports to share ideas on common problems prevailing in their respective countries. On Wednesday the participants visited a number of veterinary places including Botswana Meat Commission.

The ten countries participating are Angola, Ethiopia, Lesotho, Malawi, Mozambique, Swaziland, Uganda, Tanzania, Zambia and Botswana.

Among those who are attending the conference are some observers from some international organisations such as USAID, FAO, ECA, UNDP and a delegation from the Zimbabwean Patriotic Front.

BRAZIL

GOVERNMENT CRITICIZED FOR INEFFECTIVE ERADICATION MEASURES

Sao Paulo O ESTADO DE SAO PAULO in Portuguese 22 Aug 78 p 27

[Text] Porto Alegre--Luis Carlos Pinheiro Machado, Rio Grande do Sul expert in hog raising, criticized the government, especially Ministry of Agriculture authorities, for the spread of African swine fever, "now a national problem," and suggested effective approaches to combating the disease, since what has been done so far "is extremely timid in relation to the seriousness of the problem." He asks what authority invited two Canadian experts responsible for eradicating African swine fever in Cuba and then simply did not receive them, according to a report published by the BRAZIL HERALD on 21 July.

Pinheiro Machado--former professor of hog-raising practice at the Federal University of Rio Grande do Sul, lecturer at the University of Buenos Aires, author of books, these and articles on the subject--considers the question of African swine fever a national problem, because there are "about 100 focuses verified through laboratory tests that leave no doubt as to the veracity of the result."

"These focuses," he added, "occur from Marajo Island to the Rio Grande do Sul city of Tres Passos, affecting practically all the prominent producing states in the sector, mainly Sao Paulo, Parana, Santa Catarina and, now, Rio Grande do Sul."

Uncertainty

Nevertheless, the expert expressed in Porto Alegre yesterday an uncertainty which, he contends, must be explained by the authorities, one which is raised by "many veterinarians of the greatest competence." He recalled that the international literature about the symptomatology of African swine fever says that one of its characteristics is a "very high mortality rate" and that "after a certain period of the disease's development it becomes explosive, with the death of 80 to 100 percent of the animals

affected. Now, regarding the focus recorded in Rio de Janeiro, there is no doubt, because the mortality occurred and because even Sergio Bogado, who is historically the greatest authority on the subject, confirmed it; but the same thing has not occurred in other states."

The Rio Grande do Sul expert emphasized that it is a matter "of only a hypothesis," but he recalled the invasion of Newcastle disease in poultry, which theoretically entered the country via the Belem airport, carried by a person now dead who did so in order to be able to install a vaccine laboratory in Rio de Janeiro. Then, "by analogy," according to him, "such a hypothesis cannot be totally and easily set aside in the case of African swine fever, because, although an effective vaccine is not known, no one can be sure that some group has not discovered it and would be interested in expanding its market, presently confined to Africa, Spain and Portugal."

Consequently, the expert believes that "the uncertainty as to the occurrence of African swine fever must be raised, and the Ministry of Agriculture is responsible for a definitive, absolute explanation." For that reason, he continued, this will be the first question to be asked of the ministry's experts at a meeting scheduled for next week in Parana: "After all, is it or is it not African fever?"

The Threat

As for the "timidity" with which Brazilian authorities have confronted the problem since it emerged last May in Rio de Janeiro, Pinheiro Machado said: "We are now under a threat which could become permanent, because, from the moment that swine fever in Brazil infects a wild animal, such as a tick or a mosquito, control becomes impossible in view of the characteristics and the size of the nation."

He gave as an example Rio Grande do Sul, which has, in the Uruguay River, a natural boundary with Santa Catarina. "Attention was called to that fact in the beginning," he asserted, "since every vehicle that entered the state should be controlled, but they backed off, alleging that it would be too much trouble to stop 2,000 vehicles daily."

In addition, he cited the period of 20 days for confirming laboratory tests for the focuses discovered in Tres Passos, Rio Grande do Sul, pointing out: "Here the contrary of what is recommended by the International Animal Disease Center is being done. According to it, when a suspicion exists, the first step is to liquidate all the animals in the focus, including cats, dogs and rats, and only later verify whether it is a matter of fever and discuss it with the owner; we cannot wait around 20 days for the results of the test."

He also mentioned the fact that, a month after discovery of the focus in Rio de Janeiro, 60 cubic meters of in-flight food coming from Africa arrive daily at Galeao Airport, and there is still no incinerator at that airport. In Porto Alegre the authorities provided for burning the in-flight foods in the incinerators of the Jockey Club, but to do this they had to travel across the city, and "the virus cannot tour around so much."

8834

CSO: 5400

BRAZIL

AGRICULTURE MINISTER WARNS OF FURTHER SPREAD OF SWINE FEVER

Sao Paulo O ESTADO DE SAO PAULO in Portuguese 25 Aug 78 p 24

[Text] Florianopolis--African swine fever has already hit 14 Brazilian states and may spread even further, Alysson Paulinelli, minister of agriculture, said yesterday during a visit to Florianopolis. He added that, from now on, new instruments will be used for more rapid identification of focuses, and he reaffirmed that exterminating the animals is the solution to eliminating the disease. The government believes that "the greatest danger is that of the disease not being controlled."

The minister denied reports about possible government intervention in cold-storage plants to increase control of meat prices; he said that the present concern is to render assistance to hog farmers as a consequence of swine fever. "It was for this purpose that a price guarantee was given, in addition to purchase of excess stocks, through COBAL [Brazilian Foods Company] and even the proposal for restricted sale to the cold-storage plants with the proviso for redemption or annulment of contract, if they so desire. What we do not want to do is to nationalize," he added. Paulinelli announced the opening of new sanitary corridors in Rio Grande do Sul. Authorization for operation of such corridors should appear in the DIARIO OFICIAL DA UNIAO which comes out today. He noted that three Rio Grande do Sul cold-storage plants are authorized to buy excess pork from Santa Catarina.

The minister said that his trip to Santa Catarina is justified by the government's desire to accelerate the identification and extermination of African swine fever focuses. That was the theme of the meeting he held yesterday with Governor Konder Reis and authorities connected with the sector. Paulinelli also said there are reports that in some areas farmers are receiving prices lower than those established by the government. Today Paulinelli will go with his staff to Chapeco, in western Santa Catarina, where he will discuss with hog farmers matters related to the African fever campaign.

BRAZIL

SWINE FEVER FOCUS FOUND IN MARANHÃO, SUSPECTED IN CEARA

Rio de Janeiro JORNAL DO BRASIL in Portuguese 27 Aug 78 p 24

[Text] Sao Luis--An African swine fever focus was discovered in the rural zone of the city of Chapadinha, 400 km from the state capital, the Maranhao office of the Agriculture Ministry announced. About 500 pigs have been slaughtered, cremated and buried. The municipality's five exits were closed to the entrance and departure of swine and their derivatives.

Experts from the Agriculture Ministry office and the Agriculture Secretariat, together with veterinary students, have been operating for a week in the Lower Parnaiba region, where Chapadinha, with one of the largest swine herds in the state, is located.

In Ceara

Fortaleza--The regional office of the Agriculture Ministry sent material collected from scores of pigs found dead in various Ceara municipalities to Rio de Janeiro for analysis. The cause of their death is suspect, as it is feared that they are the first signs of the presence of swine fever in the state.

8834

CSO: 5400

BRAZIL

SWINE FEVER PERSISTS IN PERNAMBUCO DESPITE SLAUGHTER

Rio de Janeiro JORNAL DO BRASIL in Portuguese 31 Aug 78 p 9

[Excerpts] Recife--The first focus of African swine fever in Pernambuco, detected 15 days ago in the municipality of Sao Lourenco de Mata, has not yet been exterminated, although 2,500 animals have been slaughtered, the chairman of the executive commission to combat animal disease, veterinarian Amadeu Sebastiao da Silva, announced.

Eradication of the focus, on a Sao Lourenco farm 30 kilometers from Recife, was begun immediately, but the possibility of contaminating the state's entire herd--600,000 head--led the commission experts to decide upon slaughtering all the animals in the region surrounding the farm, where there are nearly 6,000 head of swine.

Slaughterhouse

In 2 weeks of fighting the African fever in Pernambuco, Ministry of Agriculture experts have found four focuses of the disease, in the municipalities of Sao Lourenco de Mata, Garanhuns (230 kilometers from Recife), Palmeirina (228 km) and Terezinha (261 km), the last three focuses already exterminated through the slaughter of nearly 200 animals.

A fifth focus was discovered at the C. Maranhao Ltd. industrial slaughterhouse, the largest in the state, which had to be shut down for 24 hours for a complete disinfection. At the beginning of this week contamination was suspected at the Marajo SA slaughterhouse, but the report was denied.

The Ministry of Agriculture calculates the compensation to farmers whose animals were hit by the disease at 4.6 million cruzeiros initially, and it believes that this figure may be doubled.

8834

CSO: 5400

BRAZIL

BOVINE RABIES FOCUSES REPORTED IN BAHIA INTERIOR

Rio de Janeiro O GLOBO in Portuguese 26 Aug 78 p 8

[Text] The director of the Bahia Biological Institute, Edson Moniz, yesterday confirmed the existence of paralytic bovine rabies focuses in at least two regions of the state: Vitoria da Conquista and Itapetinga. He also announced that focuses are suspected in Itabuna, Itaju do Colonia and Itapevi, where the institute's veterinarians have been making an inspection.

Edson Moniz explained that he has been receiving reports about the illness from Vitoria da Conquista for several months, but the number of cases has recently increased. The institute also discovered the disease in Itapetinga, after examining the head of a dog.

To prevent the disease from spreading throughout the state, the Agriculture Secretariat signed an agreement with the Executive Commission for the Cacao Production Plan, and a funding of 1.6 million cruzeiros is to be released for a mass vaccination campaign in the affected areas and also for trapping bloodsucking bats.

Paralytic bovine rabies, according to Edson Moniz, has no cure and thus causes "incalculable damage" to livestock, in addition to its social effects. But its occurrence in people is much lower than in animals. The vaccination campaign will also include dogs in an effort to block off the two main channels by which the disease is transmitted, although it can also be transmitted by other animals.

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HONDURAS

BRIEFS

SWINE FEVER WARNING--Tegucigalpa, 28 Sep (ACAN-EFE)--Honduran Natural Resources Minister Rafael Leonardo Celles today warned the people against the threat of swine fever. He said that the government has imposed preventive measures against the outbreak of the disease in Honduras which include fumigation and the confiscation of certain products from Brazil and the Dominican Republic. [Panama City ACAN in Spanish 0200 GMT 28 Sep 78 PA]

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INTER-AFRICAN AFFAIRS

SYMPOSIUM HELD IN IBADAN ON MANIOC BACTERIOSIS

Brazzaville MWETI in French 30 Aug, 2 Sep 78

[Article by Makambila]

[30 Aug 78 p 2]

[Text] A symposium was held at the International Institute for Tropical Agriculture in Ibadan (Federal Republic of Nigeria) from 26 to 30 June 1978 to discuss manioc bacteriosis, a plant disease which is very widespread here in the People's Republic of Congo. Attending the seminar were representatives not only of the African manioc-producing countries (Senegal, Ghana, Sierra Leone, Togo, Nigeria, Cameroon, Congo, Angola, Zaire, Tanzania, Kenya, and Uganda), but also research people from Belgium, Latin America, Great Britain, and other European countries. Mr Makambila, teaching assistant at the Plant Biology and Physiology Laboratory at Marien Ngouabi University, reports on the proceedings.

Manioc is subject to a number of diseases in most of the countries that grow it, but the severity of each disease may vary from one country to another, and even from region to region within the same country.

Some of these diseases are caused by fungi (Anthracnose: leaf-spot disease), or by microorganisms such as the bacterias (manioc bacteriosis) and the viruses (manioc mosaic disease).

Still other very destructive diseases are caused by insects: one such is a disease which has ravaged crops here in the Congo and is still endemic in some of our regions (Pool Niari, and Kouilou). The carrier of this disease is a scale insect known as cochineal.

All these diseases are easily recognized.

The rots, found mainly in the tubers of the plant, are very ancient diseases, usually encountered in poorly drained areas and in forested regions. The rots are very widespread, for example, in the Pool region and in Mayombe, two regions where manioc is grown in forested zones.

Manioc anthracnose attacks the portions of the plant above the soil. It is readily recognized by the lesions it causes along the stem, particularly toward its terminal portion.

Leaf-spot disease, as the name indicates, is characterized by the presence of spots on plant leaves. The spots may be small or fairly large, round or oval in shape, and brown or very occasionally whitish in color, and are concentrated in the center or at the tip of the leaf.

Among the diseases caused by insects, one of the most destructive, causing a great deal of crop loss, is due to the farinaceous cochineal, commonly called the "Apollo" beetle. Apollo is very dangerous: many plantations in the southern Pool area are still infested with it, although there is no indication of its presence in northern Pool, including Odziba and Mbe. Apollo is very easy to recognize by the whitish flocculent deposit it produces at the terminal bud or the immediate subterminal zone. All plants that have suffered Apollo infestation can be identified by the presence of sections along the stem in which the spaces between nodes are very short.

Still another very recently reported disease caused by an as yet unidentified insect, is causing widespread destruction on the Mbe farm.

Mosaic disease, which is caused by a virus, shows up as the presence in the female plant of pale green spots and leaf deformities.

Then there is bacteriosis, which was the topic of this symposium: it is characterized by a sudden wilting and withering of the leaves and by the appearance of a gummy exudate in places. Leaf dehydration, of course, leads to the death of the plant.

The second important point to be noted is that the most superficial analysis reveals that most of the countries producing manioc in Africa are third-world countries. In such poor countries, studies conducted by numerous international agencies show that, on the one hand, thousands of families live on the proceeds of sales of manioc in various forms (leaves, gari, fufufu, Tapioca, Chikouangue, tubers...); and, on the other hand, that these same thousands of families themselves eat manioc, from which they derive the energy they need to nourish their bodies.

These two facts, taken together, show the importance of manioc in our countries, owing to its twofold use in thousands of families. For one thing, it is a very cheap source of energy and, for another, it may properly be considered as a source of cash income.

These same facts also show that over the past several years a great many diseases have begun to afflict this crop, and that there has been a resultant decline in manioc production, both tubers and leaves -- the latter a vegetable highly esteemed in many African countries.

It is these two aspects which have motivated several research workers all over the world, including those of the International Institute for Tropical Agriculture in Nigeria and the International Tropical Agriculture Center in Colombia, Latin America, to put all their resources into a study of this problem and into finding truly effective solutions for it.

Similarly, it was as a result of this situation that manioc-improvement programs were started in many manioc-producing countries. The main purpose of programs like these is to develop better methods for cultivating manioc that will counteract these diseases. One of the commonest methods of fighting the pests consists of planting new varieties of manioc which have been found to be resistant to certain diseases such as bacteriosis and mosaic. These new varieties, obtained by crossing several strains that seemed to be naturally fairly disease-resistant, are distributed free of charge by the IITA in the form of seed. It is then left up to the countries getting the free seed to plant it, see how the plants thrive, cull them, and keep the seed from those proving to be disease-resistant and heavy bearers.

An initial symposium was held in 1976; this one in 1978 is the latest to be devoted to this disease. It emerges from this symposium that a great deal of progress has been made, on the one hand in the identification of the pathogenic agents and their effect on the plant itself; and on the other hand in the development of new strains of manioc which are resistant to bacteriosis.

Here in the Congo, an improvement program has been under way for the past several years in the wake of the ravages caused by Apollo infestations in several manioc plantations.

This program, which involves agronomists, research people at the University and others at France's Overseas Scientific and Technical Research Office [ORSTOM], does not yet seem to be getting all the funding it needs. This has meant that these widely varied and sometimes truly basic lines of research have not yet

yielded -- at least in some cases -- their small share of findings which could make a direct contribution to the improvement of this crop.

A large shipment of plant material received 2 years ago is now being tested at Mbe farm and at Loudima. The objective will be to use the next few years for experimenting with and selecting promising plants from the shipment, and then distributing them to growers.

2 Sep 78 p 4

[Text] Pending the final results of this work, however, some measures must be taken to try to halt the spread of these diseases. These measures, which are based on observations and experiments conducted at the Adziba farm, include: using only cuttings from health plants for new manioc plantings. The fact is that most of the diseases described earlier can be spread by infected cuttings. Cuttings infected with a virus, with bacteria, with rot mycelia, or with cochineal eggs can spread the diseases into new plantings, if infected cuttings are planted in the new field. Any infected plant material must be destroyed. Repeated experiments conducted at Odziba or in the laboratory show that the use of virus-infected cuttings leads to infected buds, and that the first leaves to appear on the new shoots show the early symptoms of mosaic disease. The same holds true for manioc bacteriosis.

It is not recommended, either, to take cuttings from plants severely infected with anthracnose. They are very slow to germinate, and very often fail to germinate at all.

Use of tolerant cultivars. A tolerant variety may be defined as one which carries the disease, but is not therefore afflicted with major metabolic disturbances. In the Pool region, an area which we have surveyed very carefully, the variety known locally as Mpeimbe is tolerant to bacteriosis and anthracnose. This variety may still be used, despite its susceptibility to the manioc cochineal.

Timing of cuttings. Whenever possible, it is better to change the date when cuttings are taken, which usually coincides with the onset of the rainy season. We already know that rain favors the development of some diseases (bacteriosis and anthracnose). But if cuttings are taken at the end of the rainy season, say in May, the young plants growing from those cuttings would not be attacked by bacteriosis or anthracnose until the next rains, by which time they would have reached maturity and built up enough vigor to withstand the attack.

Adoption of this practice in a given region will require some preliminary observation of the behavior of certain growing factors such as rainfall, relative humidity, and temperatures. On the other hand, this practice can readily be adopted at Odziba, so why not at Mbe? Our experiments have shown that it can be done.

Use of early varieties. Early varieties are defined as those which can form and ripen their tubers very early in the season. Early varieties can be harvested in 6 months, whereas late varieties require 12, 15, and even 18 months before they are ready to harvest.

This practice may offer advantages for large-scale operations like Odziba and Mbe. It may make it possible to avoid the periods of heaviest pest attack, which most frequently fall in the middle of the rainy season, by taking cuttings immediately the rains are over. At Odziba right now we are watching the performance of several early varieties we gathered in the Pool region.

Combating root-rot. One way to control rot is to let fields lie fallow for long periods of time. That might help cut down the infestation rate in a rot-infested field. To get back again to manioc bacteriosis, can we look upon it now as one more disease that has been conquered by science, like smallpox? Would it not be rash, this early in the game, to answer "yes" to that question?

However, even if manioc bacteriosis is indeed already banished, thanks to science, I personally think that this should in no way demobilize our program to improve our manioc crops, because there is still a lot to be done. We are only at the beginning, and other even more destructive diseases, already reported from neighboring countries, could crop up at any moment right here in the Congo.

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MAURITANIA

LOCUSTS THREATEN HARVESTS , INSECTICIDE SHIPPED

Nouakchott CHAAB in French 5 Sep 78 p 8

[Text] Within the framework of the campaign against the migratory locusts which is going on currently in several of the agricultural regions, the first region agricultural team has carried out a week-long mission in the departments located in the south and southwest of the region.

The agricultural team, which returned to the capital of the First Region last Friday, reported at that time that the pests were now multiplying in the departments of Djigueni, Amourj and Timbreda, which is causing great harm to the agricultural production of Bousteila and the other villages in the south of Djigueni.

The agricultural services in the region are taking note of the effective participation of the region's farmers in the campaign against the migratory locusts.

The AMP [expansion unknown] correspondent in the First Region reports that a responsible official of the agricultural service has called the situation extremely dangerous, emphasizing that it demands both effective and energetic measures.

This campaign by the agricultural team was limited last week to the villages of "Tichilit El Khadeur," Amraicha, Rmail, Ladeb, Azekra, Kmamiya and Foutsrani in addition to the city of Djigueni. These are the most important agricultural centers in the First Region, especially for the production of millet and maize.

Within this framewrok the governor of the First Region presided over a meeting with the responsible officers of the agricultural service in the region.

This meeting had the purpose of permitting an exchange of views on the most effective manner of terminating this scourge.

At the end of this meeting adequate measures were taken to that effect, including the shipping of a large quantity of insecticide into the affected areas.

MAURITANIA

BRIEFS

ANTI-GRASSHOPPER MEASURES--The Ministry of Rural Development has recently taken urgent measures in order to combat grasshoppers in the first agricultural region, which covers the first and second regions. Within that framework, a center has been created at Djigueni for the purpose of crushing the invasion of the destructive pests. Equipped with vehicles, and material and human resources, this center is the headquarters of the official responsible for the agricultural area. He intends to make a success of his mission, which consists of wiping out the damage caused by the grasshoppers infesting that part of the country. At present a team at the center is undertaking a campaign against the pests in each of the localities of Djigueni and Bousteila. The minister of rural development also recently sent a note to the administrative authorities of the first and second regions inviting them to collaborate with him in the current campaign that he is carrying out in the two regions. [Text] [Nouakchott CHAAB in French 31 Aug 78 p 8] 12,116

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RHODESIA

BRIEFS

MENACE OF TICKS, LOCUSTS, TSETSE FLIES--IANA [Inter-African News Agency] says that tick infestation, swarms of locusts and tsetse fly are a growing menace to Rhodesian rural areas. The agency says that as a direct result of terrorist attacks on dipping programs, tickborne diseases have killed about 550,000 head of cattle in the tribal trust lands. Quoting health and agricultural experts, the agency says that tsetse fly is rapidly regaining lost territory in many of these areas where it was formerly eradicated. Because Mozambique refuses to cooperate with Rhodesia on locust control, there is also a growing menace of large swarms invading the country to the detriment of its crops. The agency adds that in the Kandeya Tribal Trust Land tick diseases have reduced herds from 38,000 in 1972, when the terrorist war intensified, to less than 18,000 today. [Text] [Salisbury Domestic Service in English 1115 GMT 24 Sep 78 LD]

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